



POSTER PRESENTATION

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Oral immunotherapy with raw egg: immunological data at 6 and 18 months

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Background

The efficacy, tolerability and immunological results of a SOTI regime with liquid pasteurized egg (SOTI-LPE) (both yolk and white) in 36 egg allergic children have already been published [1]. We present the immunological data at 6 (visit R1) and 18 months (visit R2) after completing SOTI.

Methods

By protocol skin prick testing (SPT) with egg white (EW), yolk (EY), ovalbumin (OVA), and ovomucoid (OVM); specific IgE against white, yolk, OVA, and OVM, and specific IgG4 against OVA and OVM were performed at 6 and 18 months after completing the SOTI regime. The results were compared with those of the inclusion visit (B0).

Results

SPT showed a trend towards a decrease in the wheal surface area (mean in mm² B0 vs mean R1, p value; vs mean R2, p value): EW 97.5 vs 38.0, p<0.0001; vs 36.3, p<0.001; EY 33.5 vs 12.4 p<0.0001; vs 12.3, p=0.003; OVA 55.6 vs 19.1 p<0.0001; vs 17.3, p<0.001; OVM 109.6 vs 56.9, p=0.005; vs 44.8, p=0.000.

Mean sIgE values tended to increase at R1 and then decrease at R2 (IgE kU/L B0 vs R1, p value; vs R2, p value): EW 12.2 vs 28.8, p<0.0001; vs 10.6, p=0.322; EY 9.4 vs 7.1, p<0.0001; vs 7.6, p=0.069; OVA 9.4 vs 11.6, p=0.002; vs 8.7, p=0.95; OVM 10.9 vs 24.2, p<0.0001; vs 8.9, p=0.015.

Mean sIgG4 values significantly increased (IgG4 mg/L B0 vs R1, p value; vs R2, p value): OVA 1.2 vs 16.9, p<0.001; vs 18.9, p<0.001; OVM 1.1 vs 5.0, p<0.001; vs 8.1, p<0.001. IgG4 increases were also seen in patients not acquiring clinical tolerance to LPE.

Conclusion

Global immunological results indicate significant changes suggesting the stimulation of immunological tolerance pathways in egg allergic children treated with SOTI-LPE: a decrease in skin reactivity and increase of sIgG4 antibodies. As a whole, IgE antibodies did not significantly change at 18 months as compared to baseline.

Disclosure of interest

None declared.

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Reference

1. Ojeda P, Ojeda I, Rubio G, Pineda F: Home-Based Oral Immunotherapy Protocol with Pasteurized Egg for Children Allergic to Hen's Egg. *IMAJ* 2012, **14**:34-39.

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